

## YY, CY or SY style flexible cables

These charts are extracted in abbreviated form from DIN VDE 0100 part 430 and DIN VDE 0298 and relate to flexible PVC, PUR or LSZH sheathed cables with or without copper or steel wire braid, such as YY type non-braided control, CY or SY type braided control, LIYY or LIYCY type signal & superflex robotics & drag-chain cables.

The figures shown are to be considered as guiding values only.  
In critical situations the DIN VDE recommendations should be considered.

Current Carrying Capacity in Ampere (Amps)				
One, two, three or four core cables, based on an ambient temperature of 30°C				
Area (mm <sup>2</sup> )	Rating (amps)		Area (mm <sup>2</sup> )	Rating (amps)
0.14	1.5		16.0	82
0.25	2.5		25.0	108
0.34	4		35.0	135
0.50	7		50.0	168
0.75	12		70.0	207
1.00	15		95.0	250
1.50	18		120.0	292
2.50	26		150.0	335
4.00	34		185.0	382
6.00	44		240.0	453
10.0	61		300.0	523

Conversion factors for cables with 5 or more cores, up to 10.0mm <sup>2</sup>								
No. of Cores:	5	7	10	14	19	24	40	61
Factor:	0.75	0.65	0.55	0.50	0.45	0.40	0.35	0.30

## YY, CY or SY style flexible cables

Continued from previous page:

Conversion factors for deviating temperatures					
Ambient Air Temperature	Permissible Operating Temperature				
	40°C	60°C	70°C	80°C	90°C
10°C	1.73	1.29	1.22	1.18	1.15
15°C	1.58	1.22	1.17	1.14	1.12
20°C	1.41	1.15	1.12	1.10	1.08
25°C	1.22	1.08	1.06	1.05	1.04
30°C	1.00	1.00	1.00	1.00	1.00
35°C	0.71	0.91	0.94	0.95	0.96
40°C	-	0.82	0.87	0.89	0.91
45°C	-	0.71	0.79	0.84	0.87
50°C	-	0.58	0.71	0.77	0.82
55°C	-	0.41	0.61	0.71	0.76
60°C	-	-	0.50	0.63	0.71
65°C	-	-	0.35	0.55	0.65
70°C	-	-	-	0.45	0.58
75°C	-	-	-	0.32	0.50
80°C	-	-	-	-	0.41
85°C	-	-	-	-	0.29

Although Central Cables Ltd has made every reasonable effort to ensure its accuracy, the information contained herein is subject to error or omission and to change without notice. In no event will Central Cables be liable for any damages whatsoever, arising in connection with the information described.